THE CANADIAN AUTOMOBILE INDUSTRY:

AN ANNOTATED BIBLIOGRAPHY

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Automotive News (1980), "Quality Is Rated First Among Buyer Concerns," November 24, p 21.

Harold A. Poling, executive vice-president of Ford addressing the ASQC stated that the American consumers now place quality at the top of their list of automotive demands. Fuel economy comes second. In early 1970's styling was the consumers number one concern. In quality ratings, American cars usually come in second to the imports.

Automotive News (1980), "First Impressions Come Right From Car's Finish," November 24, p E-16.

The auto industry realizes new-car buyers are attracted not only by improved gasoline mileage but by "fit and finish". The auto industry is responding to the public perception that some foreign cars have a better quality finish by developing a custom-finish for N.A. cars through advances in coatings and color finishes.

Automotive News (1980), "Dedicated Drive For Quality Called Top Priority At GM," December 1, p 4.

This article reports on an address by GM's executive vice-president F. James McDonald. McDonald stated that GM's future depends on the public perception of quality: Quality is linked very strongly with customer satisfaction. GM plans to achieve improved quality and customer satisfaction through new technology, improved manufacturing techniques and more modern facilities and equipment. GM spending $40 billion worldwide between 1980-84.

Automotive News (1981), "Study Shows Buyers Swinging To Big Cars," January 12, p. 20

A November 1980 poll of 800 adults taken by the Newspaper Advertising Bureau indicated that car buyers are more likely to choose a bigger car and have a higher preference for North American built cars than at the beginning of 1980. The majority of those interviewed were wary about making a major purchase due to the economic conditions. Small car preference dropped from 55% in January to 36% in November. Full-size car preference increased from 37% to 50%, and mid-size car preference increased from 24% to 31%. In January, 34% of those who planned to buy a subcompact favoured an import. This figure dropped to 26% by November.

Automotive News (1981), "Chrysler Establishes 41st Customer Arbitration Panel," January 19, p. 16,20.

Chrysler plans to establish 55 Customer Satisfaction arbitration boards in the U.S. operated under the Federal Trade Commission (FTC) guidelines by April 1, 1981. The board will handle customer warranty deposits.

Automotive News (1981), "Canada Approves Revision of Ford Production Formula," January 19, p. 42.

The Canadian Federal government has set a precedent under the auto pact by allowing the Ford Motor Co. of Canada to meet its required production level by using a combined car/truck formula. The Oakville assembly plant will produce all N.A. LTD's and will be converted for the production of the 1983½ Fairmont/Zephyr models. Ford also has a truck plant in Oakville.

Automotive News (1981), "GM $40-Billion Program In Jeopardy," April 20, p. 20.

A speech by F. James McDonald, GM President to a University of Detroit Forum, indicated that the $40 billion capital investment plans by GM between 1980-84 may not materialize unless government and labour cooperate. GM can meet its goals if government continues easing regulations and if labour takes concessions. U.S. makers are operating at about an $8 an hour labour cost disadvantage compared to the Japanese industry. GM has introduced a new "Quality of Work Life" program to get workers now involved in operations in an effort to improve quality and productivity.

Automotive Task Force (1977), "Review of the North American Automobile Industry."

This study primarily evaluates the motor vehicle industry in North America and in particular the pattern of production and supply which the industry has established in Canada and the United States. As well the study assesses the possible direction of automotive production activity in Canada and the United States in the light of changing circumstances.

The Canadian study consists of three parts; (1) the Motor Vehicle Manufacturing Industry, (2) a Profile of the Automotive Parts Industry in Canada and (3) Prospects for Offshore Motor Vehicle Manufacturers.

Sections of the Motor Vehicle Manufacturing Industry report consists of an overview of the North American Automotive Industry (Canada as part of the N.A. auto industry, effect of Auto Pact and the current employment and market); The Structure of the Industry (industry segments, profile of the four major auto makers); Market Structures and Model-Price Competition (market state, shares of auto makers, price elasticity of demand for different car categories); Price and Cost Action (break-even analysis, flexibility, labour costs, trends); Financial Analysis (profit records, return on capital, dividends, RE for N.A. industry and then Canadian inclusively); Research and Development (expenditures in US and Canadian); Capital Expenditures (Canadian and U.S.); Labour Employment, Skill and Productivity (Comparison between Canadian and U.S., input and output measures); and Future Environment For the North American Motor Vehicle Industry (prospects of success for automobiles and ffect on Canada).

Sections of "A Profile of the Automotive Parts Industry In Canada" consist of Consumption; Production; Capacity; Employment and Labour Productivity; Financial Viability and Capital Investment; Age and Availability of Machine Tools; Business Environment in Canada; New Competitive Environment in North America; and Third World Competition.

Section of "Prospects for Offshore Motor Vehicle Manufacturers in the North American Market" consists of World Motor Vehicle Production and Export; International Comparison of Production Unit Costs; World Demand; Offshore Import trends in the North American Automotive Market (particular references to Japan); Captive Imports of Passenger Cars; The Automotive Industries in Europe (Germany, France, Britain, Italy); The Automotive Industry in Japan; The Automotive Industries in Developing Countries; and Overseas Operations of the North American Vehicle Manufacturers.

Burck, Charles G.(1980), "A Comeback Decade for the American Car," Fortune, June 2, 52-56, 58, 63, 65.

This article examines what the North American auto makers plans are for the 1980s to fight off the import invasion. North American auto makers were caught off guard when gas shortages and price increases occurred in 1979. Imports grabbed 27% of the market, primarily at the expense of Ford and Chrysler. David Eisenberg of Sanford C. Bernstein & Co. projects that GM's market share will rise beyond 50% after 1983, while Ford's will fall below 20%. Townsend-Greenspan & Co predict a growth rate for new cars of 2.1% per year to 1990. Ford expects no more than 1.4% per year. The majority of new car purchasers earn an income of $20,000 per plus. The auto market has reached full maturity. The fundamental problem was that the auto industry lost touch with its consumers' changing tastes, i.e. from size, power, comfort, and dazzle to "fit and finish" and reliability, at which the Japanese excelled. The ability to respond to this change has been made difficult by quality control problems at N. American plants.

Bohn, Joseph (1980), "Dual Deals: They're Popping Up In Domestics and Imports and Customers Can Compare In the Showroom," Automotive News November 17, E1, E6.

This article reports on the trend of auto dealers going to a dual or multi-franchise agreement with manufacturers. Manufacturers promote such ideas where the market can not support two or more dealerships. Negative aspects are the increased number of factory reps calling on the dealer and the dealer means loss to the factory. GM does not promote duals. With owner brand loyalty slipping among all manufacturers, customers are more prone to shop around--which plays directly into the automart concept.

Bohn, Joseph (1981), "Ads Observe Dealers' Rebate Role," Automotive News, March 9, p. 3,6.

Ford and GM rebates to consumer are paid in part by the dealers, who tend to pass on this cost to the customers. Customers end up with smaller discounts than normal which lowers the advertised value of the savings. GM was asked to insist in its advertising the fact that the dealers were contributing to this rebate.

Business Week (1978), "A Tougher EPA Worries Detroit," (April 10), 80.

To control auto emissions, the Environmental Protection Agency has shifted tactics and is pressing auto makers to guarantee that their cars will remain in compliance after they are on the road. Previously, the main objective had been the development of better pollution control equipment in meeting future federal air standards. However, the EPA felt that present control performance was falling short in meeting standards. The new strategy includes borrowing consumers' cars, several days' testing, and forcing manufacturers' recall of automobiles that fail emissions tests. The new plan came about when the EPA suspected that manufacturers were using specially built cars to pass emissions tests. Also, there is a crackdown on service stations that pump leaded gasoline into cars meant to run on the cleaner-burning unleaded fuel. Auto manufacturers have expressed concern over the departure of the EPA's deputy assistant administrator, as they felt he had given the industry's problems a fair hearing. He was viewed as one of the more reasonable voices of the EPA. His replacement has not been announced, but it is feared that the successor will be stricter, adhering to EPA policy and strategy. Most worrisome to the industry is the possibility of testing every car made instead of using a random average.

Business Week (1978), "GM Tests Arbitration to Quell Buyer Unrest," October 2, 34,36.

GM is quietly testing a binding arbitration program to settle customer complaints in the Minneapolis-St. Paul area. GM hopes the program, underway since June 15, will suggest ways to quell consumer restiveness and stave off government intervention in resolving gripes from consumers. Minnisota is considered a typical auto market. The state's Better Business Bureau (BBB) has been chosen to handle the program because of its activist reputation. The purpose is to resolve complaints of auto defects after the company's 12,000-mile/12-month warranty expires. There is a psychological release involved because GM agrees to abide by an arbitrator's decision in disputes between dealers and customers and will reimburse full costs to dealers if the arbitrator finds for the customer. Sixty volunteer arbitrators have been chosen by the BBB to participate. Of 100 complaints received so far, only 5 have gone to arbitration. Even if the customer loses, he feels better about it. Detroit is also worried that if it does not, find a means of meeting consumer complaints, the government will step in. In California, Governor Edmund G. Brown Jr. has signed a bill requiring arbitration of all unresolved consumer-business disputes involving less than $15,000.

Byron, Christopher (1981), "An Attractive Japanese Export--The XYZ's of Management Theory Challange American Bosses," Time , March 2, 46.

This article outlines some of the features of Type Z management as proposed by UCLA management Professor William Ouchi. Ouchi proposes that the secret of Japanese corporation success is better management. The type 2 company emphasizes long-range planning, consensus decision making and strong, mutual worker-employer loyalty. Features of the Japanese management style such as lifetime employment, evaluation and promotion, non-specialized careers, and collective decision making are compared to the traditional American management style. Ouchi proposes that many features of Japanese management can be applied in the U.S. to combat problems such as high employee turnover, declining productivity and generalized worker alienation.

Clark, Rodney (1979), The Japanese Company, New Haven and London: Yale University Press, 1979.

The objective of this book is to explain how the Japanese company is run, and how its workings affect those associated with it, and the people of Japan in general. It discusses historical influences, the industrial context, organization and management, joining and leaving, the employee, and the relationship between the company and society.

Colarossi, Ben (1980), "It's Not The Product, It's The Productivity," Advertising Age, (Dec. 1), 58.

This article is an analysis of the United State automobile industry. It suggests that the current problems are not due to poor design or even large cars but instead productivity or the lack of it. Poor productivity means that imported cars can be made less expensively. Falling productivity also means attempts to cut corners enhance shoddy workmanship.

Cole, Robert E. (1981), "The Japanese Lesson in Quality," Technology Review, July.

This article compares management practices of the Japanese and U.S. auto industries.

Crafton, Steven M. and George Hoffer (1980), "Do Consumers Benefit From Auto Manufacture Rebates to Dealers?" Journal of Consumer Research, 7 (Sept.), 211-3.

Transaction prices (actual price) and dealer advertising-promotion expenditures were obtained from data distributed by the Lincoln-Mercury Division of the Ford Motor Company to its dealers in the mid-Atlantic area. A regression indicated that transaction prices were found related to dealer inventories, positively related to manufacturer list prices, inversely related to rebates (manufacture cash incentives in dollars to dealers) while dealer advertising-promotional expenditures were not related.

Dowie, Mark (1977), "How Ford Put Two Million Firetraps on Wheels," Business and Society Review, 23 (Fall), 46-55.

This article relates the Ford Pinto case history in which it is reputed that 500 burn deaths have been caused due to improper placement of the gasoline tank. The article indicates that a cost-benefit analysis of retooling and human lives could not justify a change to the design. Instead, Ford has paid out millions in order to settle damage suits out of court as well as lobby against safety standards.

Edgar, Don (1980), "Aftermarket Soars Along With Car Prices," Advertising Age, September 29, S-30

Length of time an owner keeps car has risen from 29 to 47 months, and 65% of cars in service today are 3 to 10 years old. The strong impact of this trend on the auto aftermarket is discussed.

Fleming, Al (1982), "Engineers Blame Top Management for Car Makers' Productivity Lag," Automotive News, February 15, pp. E-1, E-4, E-6.

A January 1982, survey was made of General Motors Ford Motor Co., Chrysler, American Motors and Volkswagen of America engineering personnel. The results indicated:

> The main reasons for lagging productivity in the U.S. auto industry are (1) poor performance by auto company top management, and (2) poor policies by the U.S. government.
>
> U.S. auto companies are far superior to Japanese vehicle producers in technical innovation and product design, but fall far short of the Japanese in manufacturing expertise.
>
> That while U.S.-made cars are better than Japanese and European models in most ways, they lag behind the Japanese in fit, finish and fuel economy, and trail the Europeans in driveability and handling.
>
> That fit, finish and driveability are the most important indicators of motor-vehicle quality, while emission control and handling are least important.

Flink, James J. (1975), The Car Culture, Massachusetts Institute of Technology Press, Cambridge, Massachusetts.

This book provides an overview of the American automobile industry, its prominent members such as Henry Ford, Alfred J. Sloan Jr., and William Durant, and its effect on the American society, since the invention of the automobile in the 1890's. From its introduction, the auto was compared quite favourably with the horse-drawn rig. But the motorcar was always judged on tougher criteria. People anticipated that the automobile, unlike the horse, would be substantially improved and available at a much lower price in the future. In the early 1900's, both experts and the public concluded that the automobile promised to raise significantly the quality of life and to restructure American society. Individualism and mobility were important American core values that automobility promised to preserve and enhance. The motorcar was an ideal status symbol. National Automobile Chamber of Commerce (1920) questionnaire stated 37% of auto owners reported improving living conditions through the use of cars. In mid 1950's the shoddy treatment of customers by dealers emanated from long standing policies of the automobile manufacturers. Detroit's reluctance to enter the small car market was due to a traditional rationale in automobile manufacturing - large cars are far more profitable to build than small cars. 80.7% of cars made by the Big Three which were nine years old on July 1, 1955 were still on the road compared to 55.23% on July 1, 1967.

The strategy of planned obsolescence is implemented by purposeful proliferation of model type (370 in 1967) to induce owners to trade up to something a little more glamourous. Cars are not fundamentally different from what they were in 1946. In 1971, the Wall Street Journal reported, "People today look at their cars as appliances to get them economically from place to place and to be replaced when they wear out."

Gawronski, Francis J. (1980), "3-Year Study Evaluates Car Warranties, Repairs," Automotive News, August 18, 20,24,25.

This article reports on a three-year study conducted by Kenneth M. McNeil of the University of Wisconsin Law School. The inconsistant pattern of new-car warranty protection is creating public distrust in the auto industry. The study surveyed 1537 buyers, from 33 dealerships in Madison and Milwaukee areas during the 1977 model year. 50% of buyers had some troublesome experience during the first year. 14% did not have their problem resolved at the end of the first year of ownership. Across auto makers, Ford had the fewest customers reporting any troublesome experience, 42% as opposed to Chryslers' 60%, AMC 53%, and GM's 47%. Data from the buyers' survey showed that repeat-sales loyalty of customers to the same manufacturer declines systematically as warranty service trouble increases. Working against improved warranty protection is the tendancy of dealers and auto makers to look at short-term costs rather than long-term profits that could be gained from better warranty protection. Full report is found in McNeil and Miller (1980).

Givens, Jack (1980), "Automobile Industry, Heal Thyself," Advertising Age, September 29, S-32, -33

The author, Director of Sales Operations at Chrysler, discusses current domestic auto industry problems and suggests Detroit has been a seller of Detroit's cars and Japan the marketer of consumer needs. The U.S. national import share rise of 5% in 1963 to 28% in April, 1980 has been preceded by rises in Marin County, California, where import share is now 65%. Japanese cars offer operating owners sprightly performance, maneuverability as well as high base level of trim and equipment, fit and finish, functional appeal, ambiance, and practicality which Americans of today want, even if they must pay more. Research trends indicate 1) Import appeal has changed from snob/cult/novelty to source of individual expression and primary success. 2) Purchase intentions in under 35 age group is 40% for imports. 3) Import buying is "black hole" for buyers. 4) Import loyalty is higher than domestic loyalty. Government protection, assistance, and encouragement of Japanese auto industry is also discussed.

Globe and Mail (1981) "Ford Leadership in Import Battle Stems from Special Vulnerability," March 31, B9.

This article reports on the problems facing the Ford Motor Co. in the N.A. market. While the other auto companies were downsizing, Ford emphasized larger cars and after the 1979 Iranian oil cut, was left with largely old-fashioned cars. Fords mid-size share in 1980 dropped to 16.5 percent from its customary 22 to 23 percent and is not likely to rise to more than 20 percent of the market. Ford's after tax loss was $2.1 billion in 1980. The domestic auto industry has a cost disadvantage of $1000 to $1500 a car compared to the Japanese. The desire to reduce imports is also discussed with one reason given as the alternative is to "out source components" (more production abroad) in order to reduce costs.

Globe and Mail (1981), "U.S. Auto Sector Seen Regaining Profitability But Not Former Size," April 7, B18.

The Reagan Administration plans to change or relax 34 environmental and safety regulations affecting cars and trucks to help the auto industry. The changes will save the auto industry $1.4 billion in addition to capital costs over the next five years and consumers $150 per car or truck.

A government report projects that sales of cars will increase to 9.3 million units in 1983 from 6.6 million in 1980. U.S. companies are adopting robotry, however, and the industry is becoming more capital intensive.

The Globe and Mail (1981), "Quotas Set By Japan On Car Sales," June 25, B8.

The Japanese government has set quotas for fiscal 1981 on exports by car makers to the U.S. Exports to U.S. will be set at 1.68 million vehicles for 1981 and will remain at this level for two years.

Gordon, Maynard M. (1980), "Congressmobile," Advertising Age, September 29, S-8, S-10

The government support of Chrysler and spillover effects are discussed.

Gordon, Maynard M. (1980), "The Rules of Regulations," Advertising Age, September 29, S-26, S-28

The ability of domestic and import cars to respond to emmission controls, safety standards, and fuel economy are discussed.

Gray, Ralph (1979), "GM Pushes to Insure Success of its Warranty," Advertising Age, 50 (#6), 2,69.

This article announces the introduction of a 36 month optional warranty by GM to compete with a similar warranty offered by Ford. The Continuous Protection plan supplements the standard 12 month, 12,000 mile regular warranty and AMC has a Buyer Protection Plan, a combination of a 12 and 12 with an optional 12 and 12. In early 1960's car makers vied to see who could out warranty the other.

Buyers will pay an extra $153 to $295 for the GM plan. Ford may counter by lowering its prices on the optional plan and advertise more. Elliot M. Estes, GM president stated this plan will take some of the inconvenience and financial sting out of major repairs. 50% of GM's buyers will take the plan. Experts predict that auto-service contracts will grow to a $2 billion industry within 10 years.

Guest, Robert H. (1979), "Quality of Work Life--Learning From Tarrytown," Harvard Business Review, (July-August), 76-87.

This article tells the story of the introduction of a "quality of work life" (QWL) program at GM's car assembly plant at Tarrytown. Results of the program: Tarrytown went from one of the poorest plants in its quality performance (inspection counts or dealer complaints) to one of the best among 18 plants in the division; absenteeism went from 7¼% to between 2% and 3%; in December 1978 there were only 32 grievances on the docket compared to upwards of 2000 7 years earlier.

Gustin, Lawrence R. (1980), "Detroit: Surviving the Crash," Nation's Business, 68, July 24-29.

Since the gasoline shortages of 1979 and price increases, consumers have opted for smaller and more economical cars, including more imports, and the U.S.auto industry is in bad shape. Detroit can live through its lowest production level in 22 years, but first it must reverse a few dismal trends. While retrenching with cost-cutting measures which include plant closings and layoffs, Detroit counterattacks with: 1. a push for government protection against Japanese imports, which are approximately 70% of all imports, and 2. investing $80 billion to design, tool, and produce, more small economy cars. General Motors is also spending $40 billion to be more flexible, by modernizing or building new assembly plants to react quickly to market fluctuations. A commitment has developed among U.S. car makers to adopt the world car concept. These are small, fuel-efficient cars suitable to all climates and terrains, and producible in a number of countries from standard parts. Recovery will occur eventually, but not likely immediately because of the continued recession and high personal loan interest rates.

Hayes, Robert H. (1981), "Why Japanese Factories Work," Harvard Business Review, (July-August), 56-66

On the basis of a tour of six Japanese companies (primarily electronics and computer) the author argues that the success of Japanese factories is not so much through quality circles and advanced robotic technology, but by paying attention to manufacturing basics. They constantly work to improve equipment design, inventory control systems, and worker skills through cooperation at all levels, with the ultimate goal of perfect products and error-free operations.

Hedley, Thomas (1975), "Canadian Automotive Industry," in Energy Conservation: Automotive Vehicle and Industry, Energy Research Group, Carleton University, Ottawa, Ontario, Report ER6 75-5, November, Appendix A.

This appendix represents an overview of the Canadian automotive industry up to 1975. Topics discussed include: production from 1963, sales from 1965, Auto agreement, employment, and U.S.-Canada auto prices. Canada's share of capital investment has fluctuated considerably (11.7% in 1964, 16.3% in 1966, 18.8% in 1970 and 11.7% in 1975). Integration of North American production followed the Auto Pact agreement. The Auto pact substantially increased efficiency (90% in the vehicle assembly). In late 1960's and early 1970's auto makers concentrated on small car production in Canada. This, however, has changed in recent years.

Helmers, H.O., Davisson, Charles N., and Taggart, Hubert F. (1974), Two Studies in Automobile Franchising, Ann Arbor: University of Michigan.

The first study by H.O. Helmers looks at the marketing rationale for the distribution of automobiles. The formal franchise agreement is made up of three parts: First is the agreement by the manufacturer to sell to a designated dealer in a given territory or marketing area. Second, is the agreement by the reseller to buy the product from the manufacturer and to resell it to the consuming public. The third part deals with provisions for termination of the agreement by either party. Franchising provides selective distribution of restrictive distribution of a product.

The relation between the manufacturing and his dealer is essentially symbiotic. Both have a common goal: marketing the automobile in a manover that is efficient and profitable to both. Whether the existing automobile distribution system performs its functions in accordance with the needs and desires of the consumer, it is difficult to answer. The current waves of consumerism is a strong indication that consumer's desires are not being met.

The second study by Davisson and Taggart looks at the financial and operating characteristics of Automobile Deals and the franchise system. The total number of franchised new car dealers handling all makes of passenger cars decreased during the 1960's. The NADA estimated 35,800 dealers in 1959 but only 31,000 for 1968. The average number of new cars sold per franchise (on the increase) was an estimated 168 in 1959 and 303 in 1968.

In setting up a dealer system, the industry must search for the optimum compromise or trade-off between (1) the competitive advantage of intensive market coverage by a large group of relatively small dealers providing multiple points for sales and service, and (2) the competitive advantage of limiting the number of outlets so that fewer but larger dealers will be profitable (if efficient), thus assuring that the dealers in each market can be effective competitors and can provide continuity in selling effort and service facilities. Franchise agreements do not place any restrictions on dualing; they stress the responsibility of the dealer for developing vehicle sales and for providing service for the franchise make. Buyer expectation sof dealers include a wide choice of vehicles, immediacy of delivery, promptness of repair service and adjustments in and out of warranty. However, demand and expectations vary with (1) the individual car buyer, (2) the price class of the vehicle being considered and (3) the number of models included in the lines or lines handled by the dealership.

Hickman, Ernie (1979), "...As "Smalls" Gear Up for Bigger Times Ahead," Advertising Age, September 17, S-16, S-18, S-20.

The small car's share is predicted to rise from 27% to 60% by 1989 at the expense of the big car's share which will drop from 73% to 40%. Factors discussed include: regulation (1985 average of 27.5 mpg), consumer concern about fuel efficiency, new values/rational purchasing trend (a little less performance and car), and multiple-car families. The growing specialization of the market and accompanying complexity of segmentation is discussed and exemplified by GM's X-cars (Pontiac Phoenix, Chevrolet Citation), Ford's Fairmont and Mercury Zephyr, Chrysler's Dodge and Plymouth Horizon, and AMC's Spirit and Concord.

Hickman, Ernest E. (1980), "Technology Rolls into Gear," Advertising Age, September 29, S-2, S-46

The problem of translating technological improvements into benefits consumer can perceive is discussed.

Hickman, Ernest E. (1980), "Keeping the Customer Satisfied," Advertising Age, Sept. 29, S-28, -30

This article reports on efforts of the North American auto makers to keep consumer brand loyalty when values are changing, products are changing, and competition is intense. The radical change in product offerings plus intensified competition increases the vulnerability of the automakers' customers loyalty. Automakers agree that quality control is the first step in marketing customer satisfaction and various programs have been implemented to ensure quality. Automakers can market their confidence in product quality through the warranty offered, such as Chrysler's 30 day, money back guarantee or AMC's Buyer Protection Plan. There are broad differences, however, in the way automakers view their extended warranty options. Other internal programs include monitoring of the dealer-customer relationship, the Service Supremacy program at Chevrolet, Ford's Service Technicians Motivation Program, G.M.'s satisfaction index on Communication skill program. The dealer-customer relationship has been frustrating for car marketers since powerful sales programs have been torpedoed by an insensitive service writer or an overly impatient mechanic. Half of complaints are with treatment, not with the product.

Hoffer, George, James Marchand, and John Albertine (1976), "Pricing in the Automobile Industry: A Simple Econometric Model," Southern Economic Journal, (July) 948-51.

In a study of the domestic automobile industry since removal of the Korean War price controls, factor costs and expected growth of the domestic new car market proved to be significant explanatory variables in determining wholesale prices of automobiles. It appeared that market forces have become a stronger influence on automobile prices recently. The analysis was based upon 21 yearly observations from 1953-1975 where price was the BLS wholesale price index for new cars, expected growth was the difference in anticipated sales and actual sales in previous years, and factor cost was a composite index comprised of 3x BLS wholesale price index for "materials for durable manufacturing" and 1x BLS "gross hourly rates for the motor vehicle and parts industry."

Honomichl, Jack (1980), "Consumer Signals: Why US Auto Makers Ignored Them," Advertising Age, August 4, 1980, 43,44,46,48.

Identifies "economic facts of life" which show why the US automobile industry is in the difficult straits it is to-day. Of relevance is mention of General Motors "Continuing Automotive Market Information Program" (an annual mail survey of new car buyers) and the Product Image and Awareness Study. Notes how the Japanese were particularly successful because of their one year testing in Japan to remove "new Model bugs." Notes a large discrepency between American and import cars regarding the proportion of buyers who within two or three months after purchase indicated whether they had any problems with their new cars (e.g. Omni-Horizon buyers say yes about 74% of the time versus Dodge Colt, Plymouth Arrow, Challenger at about 35% to 40% of the time).

Immen, Wallace (1981), "Good-bye Rust? Plastic is Molding the Auto's Future," The Globe and Mail, April 6, 1.

This article reports on the increasing use of lightweight materials such as plastic to replace steel in automobiles. Detroit's Big Three auto makers are replacing metal with plastic. Plastic is used to save weight and increase fuel economy. It could mean a 50% savings in fuel costs with lighter parts, GM predicts. Sale value may also be enhanced since cars will be less subject to rust.

Industry, Trade and Commerce, "Sector Profile," in The Automotive Industry in Canada, Government of Canada.

This report is an overview of the Canadian automotive industry as of 1976-77. After a brief worldwide and North America overview, Canadian producton, employment, technology, investment, profitability, the market, the Automotive Agreement, industry performance, and significant issues are discussed. U.S. manufacturers absorb 70% of the Canadian vehicle production and 75% of Canadian demand for North American vehicles is satisfied from U.S. production. The Canadian automotive industry has primarily a branch plant status. The Canadian automotive industry is composed of 30% assembly, 25% captive parts manufacturing and 45% independent parts manufacturing. The Big Three account for 95% of the vehicle assembly in Canada and 33% of parts production. Canada has had only minimal participation in the process of new technology development. Growth in the Canadian market should be 6% from 1975 to 1980 and 4% from 1980 to 1985. Canada's share of the North American market should be 9.8% in 1980 and 10.4% by 1985. Canadian holdings of the Big Three are given in Appendix 1.

Irwin, Robert W., (1980), "A Look At Cars Coming Over the Next Five Years," Automotive News, August 11, 1, 42.

The present upheaval of the American auto industry will cost $80 billion over the next 5 years. Trend is toward front-wheel drive cars with 4 cylinder engines. It appears that by 1984-5 GM should be in an even more dominant position in the auto market. Auto industry may experience a loss of $3.5 billion for 1980. Car shapes will be more wedge shape to provide better aerodynamics and thus improve fuel economy. Cars could top 40 MPG by 1990.

Jung, Allen F. (1959), "Price Variations Among Automobile Dealers In Chicago, Illinois," Journal of Business, 32 (October), 315-26.

The study was designed to determine the instance of any variation in retail automobile prices among Chicago Ford and Chev dealerships and to ascertain if each customer received the same quotation from a given dealer or if different prices were quoted to supposedly sophisticated "hard bargaining" customers than to less-knowing types. The effect of bargaining was also looked at. Found some dealers do offer lower prices than others and that lower prices can be obtained by shopping around. There was little evidence that individual dealers varied prices in any systematic fashion in order to take advantage of unsophisticated customers. A standardized bargaining approach was found to be effective in lowering car prices by more than $50 an average. There is not much difference in the prices quoted by large "volume" dealers and by smaller dealers in Chicago.

Jung, Allen F. (1961), "Impact of The Compact Cars on New-Car Prices," Journal of Business, 34 (April), 167-82.

The purpose of this study was to: (1) measure the effect of the entry of these new compact cars on other car prices and (2) investigate the behaviour of car prices over the 1959-60 model years on the basis of a survey of all new car dealers within the Chicago city limits. It was found that the effects of the new compact cars on the prices of the older compacts, the small foreign cars, and the two largest selling "low-priced" makes, were not large. The new compacts did not aid the sales of the imports but it is not clear what effect they did have. The best time to buy a new car is in January and February when lower prices prevail. The customer interested in a low price should visit several dealers. There seems to be some evidence that large volume dealers do offer some price advantages to the consumer, but, when the prices of dealers were ranked by sales, dealers which had the largest sales did not always quote the lowest prices.

Jung, Allen F. (1962), "Impact of the Compact Cars on New-Car Prices: A Reappraisal," Journal of Business, 35 (January), 70-76.

This study investigated the impact on new car prices of the introduction of compact cars. On the basis of a survey of new car dealers in Chicago, it was found that Chicago consumers who waited until the end of the model year to purchase a new car did not gain and may even have lost money by waiting. New compacts appear to have a limited effect on the prices of other cars, combined with a depressing effect on their sales.

Kwoka, John E. Jr. (1980), "Behaviour of an Auto Firm Under the Fuel Economy Constraint," Working Paper No. 28, Federal Trade Commissi Bureau of Economics, June.

This paper explores the possibility that induced price-quantity behaviour under Corporate Average Fuel Economy (CAFE) may result in increases in total gasoline consumption, opposite of CAFE's intent. The fuel economy constraint on auto manufacturers has been shown to alter this behaviour in ways that change relative prices depending on the mileage of each manufacturer's cars, increase deadweight losses in the market, alter the total quantity of vehicles and perhaps thereby offset at least partially the fuel savings envisioned.

MacDonald, N.B. (1980), "Canadian Automobile Industry: Some Emerging Perceptions/Prescriptions," Corporation House Ltd., Working Paper No. 1, March.

This paper assesses the capacity of the Canadian automobile industry to grow in the direction of supporting the resources now unutilized. It is based on data and general information from meetings with both vehicle and parts manufacturers.

Sections of the report discuss Industry Background (Canada as part of the North America automotive industry, effect of the Automotive Protection Trade Agreement, the current market and vehicle manufacturing; The Product Design Problem (need for increased product development activity in Canada); The Parts Manufacturing Problem (the amount of parts production available to independent parts manufacturers is limited); Inhibiting Factors Identified by Industry and Counter Action; and Recommendations for Action.

MacDonald, N.B. (1980), "The Future of the Canadian Automobile Industry in the Context of the North American Industry," Working Paper No. 2, Corporation House Ltd., November.

This report is the result of a study of the Canadian passenger vehicle industry to determine Canada's position as a vehicle manufacturing country in the context of the passenger vehicle of the future.

Sections of the report include: The Shape of Things To Come, Productivity in the North American Industry, Quality of Employment in the Canadian Automotive Industry, Implications of Corporate Structure, and Recommendations for Action (Modification of Vehicle Ratio Requirements, Effectiveness of Remission Orders, Possible Remission of Sales Tax to Encourage Parts Production, Support The Independent Parts Manufacturers in Canada, Apply Value for Auto Regulations Fully, Encourage Resource and Development in Specific Projects, Improve Trust and Liasion with U.S. Headquarters of Companies).

Quality of North American Automobiles are perceived as being much lower than for imported vehicles. 89% of the foreign models were considered "much better than average" compared to 0% for domestic models. Imports also have better fuel ratings than North American cars. For 1981, Japanese mini-compacts and sub-compacts have a fuel consumption average of 7.1 l/100 km compared to 8.1 for North American cars in same size category. Not enough fuel efficient cars will be available to meet the North American vehicle market until about 1985. Electric cars will only amount to 5% of vehicles on the road by 2000. Appendix E, lists holding of North American manufacturers.

Main, Jeremy (1980), "The Battle For Quality Begins," Fortune, (December 29), 28-33.

This article relates how Japanese industry has taken the lead from the U.S. in producing high quality products and what industry in the U.S. is doing and must do to compete with Japan in the world market. The Japanese have made quality the weapon that wins the world markets. 28% of U.S. automobiles are now manufactured abroad by non-U.S. companies. J.D. Powers and Associates, marketing consultants in Los Angeles, recently found that 64% of the owners of five types of new American cars reported mechanical difficulties in the first six months, vs. 35% for Japanese cars. Consumers Report states that Toyotas, Datsuns, Hondas, Mazda, Subarus, Volkswagen Rabbits and Mercedes need repairs far less frequently than other cars. In aspects of comfort, quiet, corrosion resistance, reliability of the engine and transmission, American cars can claim the advantage over Japanese cars. U.S. auto industry has lately adapted a new attitude towards vendors that combines tougher standards with a willingness to cooperate in solving problems (vs. the provision adversarial and arms-length relationship). James A.D. Grier, president of Milacron Inc. sees quality improving as robots spread through industry. To improve product quality some companies are moving away from Taylors scientific management style to use of quality circles with good results. It may take up to ten years to catch up with the Japanese.

Marketing (1981), "The Marketing Strategy Behind the New General Motors J-Cars,"May 18, 2.

James Rinehart, President, G.M. of Canada described how marketing research of owners, dealers and competition led them to the J-car concept. Foreign car owners wanted a high-content alternative that was easy-to-buy, easy-to-own, well-equipped and well-built. Sub-compact buyers are looking for fuel economy, dependability, low maintenance costs, good workmanship, manoeuverability,low price, and parts availability.

Marketing News, (1980), "Marketing,Manufacturing Skill Will Help U.S. Auto Makers Bounce Back," December 26,10.

This article reports on an interview with William S. Pickett, president and general manager, American Motors (Canada) Ltd., Brampton, Ontario. Lead time in the auto industry is three years or more, therefore must lead target. Major trends include move to front-wheel drive cars with a four cylinder engine. Diesel engines expected to power 20% of new cars by 1990. Value for money is now the first buying motivation, quality of workmanship is second and fuel economy is fourth. The loyalty factor no longer exists. Domestic auto makers will spend $80 billion to redesign and retool. 70 million cars are due for replacement. Multiple car ownership has increased to 37% and is rising. Detroit adopted a conservative approach in a volatile market. Predicts a strong resurgence of the N.A. Auto industry.

Marketing News (1981), "Growth Seen in Car Industry," March 20, 14.

This article reports on an interview with Richard M. Colcomb, vice-president and general sales manager for General Motors of Canada, who predicts the auto industry is entering a period of strong growth. GM forecasts worldwide vehicle sales will increase from 35 million to 50 million by 1990. Annual growth for GM should be 2.5 per cent in North America to 1990 and 4% for the rest of the world. Predictions for 1981 model year in Canada for industry sales are 1,325,000 vehicles 975,000 cars and 350,000 trucks. By 1985 four-cylinder cars will power 60% of GM's cars with the balance split between diesel and six-cylinder cars.

Marx, Thomas G. (1980), "The Economics of Single and Multi-Line Retail Automobile Dealerships," Journal of Marketing, 44 (Spring), 29-35.

Marx is Senior Economist at General Motors. After briefly summarizing the auto manufacturer-dealer franchise relationship, he first examines the economic rationale for a single-line dealership from the point of view of both dealer and manufacturer. He argued that this dealership type offers the greatest profit opportunity (minimum costs) for a given volume of expected sales. Manufacturers, it was concluded, receive more extensive product promotion from single-line dealers because of the negative effects of "counter-selling" on the optimal level of product promotion in multi-line dealerships. Similarly, counter-selling adversely affects the probability of the dealer selling either line. However, 50% of domestic dealers handle multiple lines because single-lines are not sufficient to provide a competitive return on the minimum necessary investment in a dealership.

The economic rationale for "price extension dualling"(Ford-Lincoln) versus "price deepening dualling"(Ford-Chev) is discussed includes minimization of counter-selling costs, reductions in the risk of wide sales fluctuations, and increases in maximum sales potential. Observations on industry practice and correlations among total sales from 1960-77 for 12 major model lines support the economic rationale.

McNeil, Kenneth and Miller, Richard E. (1980), "The Profitability of Consumer Protection: Warranty Policy in the Auto Industry," Administrative Science Quarterly, 25 (September), 407-427.

Telephone interviews were completed with an average of 50 buyers from each of 33 Wisconsin area dealerships (1537 respondents) two months after car's registration (Fall, 1976) and again after a year's experience (Spring, 1977). Owners/managers of 29 of the 33 dealerships were also interviewed as were managers in service divisions of each of the 4 Detroit auto manufacturers, observers in national trade associations, and observers in government agencies regulating warranty protection. The authors suggest that the present level of poor warranty performance apparently reflects a strategic choice, conscious or unconscious, to maintain continuing relationships with customers through a reliance on the proprietary control over the market, rather than through investments in good will assets. Three possible explanations for this choice are explored. The first explanation, that the development of good will assets is not profitable because there is no effective demand for better warranty protection, is examined and rejected. The second explanation, that the development of good will assets is not profitable because the costs of adequate warranty protection would be too great, is also examined and rejected. The third explanation, that decision making is biased against the development of good will assets because of exclusive reliance on short-term accounting systems, is supported.

In total, this paper is relevant for understanding industry practice, analyzing consumer dissatisfaction, and providing suggestions for consumer protection programs.

Moore, Miles (1980), "Canada Gets U.S. Auto Trade Lead," Automotive News, June 23, 24.

The 13th annual report from the President to Congress on the operation of the Automotive Products Trade Act stated that cross-border shipments favoured the U.S. by $472 million in 1978. This was less than ½ the 1977 surplus of 1.0 billion. Reason was that shipments from Canada grew at twice the rate as shipments from U.S. to Canada (13% vs. 6.5%). For Canada cars represented 39% of exports to U.S., parts 40%, trucks 19%, and tires and tubes 2%. Employment in auto industry in Canada for 1978 was 116,000. The Big Four automakers invested 4.57 billion in U.S. in 1978 (an increase of 72% over 1977) versus 262 million in Canada, an increase of only 14% over 1977 trucks.

Motor Vehicle Manufacturers Association of the United States, Inc. (198
World Motor Vehicle Data, 1980 Edition, 300 New Center Building, Detroit, Michigan, 48202.

Pages 259-71 give motor vehicle data for Canada for years 1951 to 1979. Exports, imports and data by manufacturers is provided.

Moyer, Mel S. and Neil M. Whitmore (1976), "An Appraisal of the Marketing Channels for Automobiles," Journal of Marketing, 40 (July), 35-40.

The article offers an appraisal of the marketing channels for automobiles from the viewpoint of the final customer. The effectiveness of the current distribution system in satisfying criteria such as outlet choice, product choice, financial costs, buying information, reliability, service, psychic costs, and adaptability is discussed. This is followed by a discussion on how channel inadequacies can be improved upon, and the obstacles in the way of the implementation of such improvements. The authors conclude that before real reforms can be enacted, automobile manufacturers will have to suspend some of their present assumptions about present marketing and initiate fresh analyses of their options.

Ontario Ministry of Treasury Economics and Intergovernmental Affairs (1978), "Canada's Share of the North American Automotive Industry: An Ontario Perspective," (May)

This paper reviews the performance of the Canadian automotive industry with particular reference to the period of economic recovery since 1975. The performance of the industry is evaluated in terms of Canada's share of overall automotive industrial activity compared with its share of the domestic market for automotive products. The role of the Ontario and Federal Government in ensuring optimum performance and benefits for Canadians from participation in the Auto Pact is reviewed. Performance targets and problems with statistical compromises are also identified.

Canada's share of the North American retail auto market has increased significantly since 1972 to an average of better than 9% in the past 5 years. Current production, however, is more than 20% below that which would be justified by Canada's market share. Canadian labour output ratio is 15 to 18% higher than in the U.S. Value added and investment have also failed to keep pace with the improved market position.

Page, Albert L. and Timothy L. Wilson (1979), "Factors Influencing the Success of Marketing Campaigns to Recall Automobiles," in Public Policy Issues In Marketing, Vol. 1, Cynthia J. Frey, Thomas C. Kinnear, and Bonnie B. Reece, eds. Ann Arbor, Michigan: Division of Research, Graduate School of Business Administration, The University of Michigan, 114-30.

This study examined the product recall area of marketing activities within the US automobile industry. A set of automobile recall campaigns was analyzed to test five hypotheses. Structural analysis of regression results indicated that automobile age and manufacturer market share are important determinants of the success of an automobile recall campaign.

Pashigian, Bendros P. (1961), The Distribution of Automobiles, An Economic Analysis of the Franchise System, Englewood Cliffs, N.J.: Prentice-Hall, Inc.

This doctoral dissertation includes an economic analysis of the franchise systems in the auto industry and includes the results of a dealer survey (84 responses) in five major markets of the U.S. The auto industry is a differentiated oligopoly in which larger firms recognize their interdependence when determining price, sales promotion and product policies. Demand for automobiles is highly sensitive to changes in disposable income. The number of franchises is usually restricted. Thus, the retail price will persistantly exceed the LRAC of the retailer, profit rates of dealers will be higher than the competitive rate of return, turnover rates among dealers is lower than for most industries, and the life expectancy of dealerships is greater than for other industries.

Many manufacturers follow a policy of "forcing" in which the manufacturer can specify a transfer price but also a sales quota which the dealer is required to fulfill. The franchise system may develop consumer-retailer attachments and hence, consumer-brand attachments more efficiently, that is, at a lower cost to the manufacturer than any other sales promotion policy. Dual dealerships have been discouraged as a long run policy by most manufacturers. Consumers do not always buy from the nearest dealer, and dealers with reputations for good prices and service draw proportionally greater number of buyers than dealers without such reputations.

Reisman, Simon (1978), "The Canadian Automotive Industry--performance and proposals for progress," Ministry of Supply and Services Canada, (Oct.).

This report is an overview of the Canadian automotive industry from its inception and concentrates on the problems and prospects facing the Canadian automotive industry today. Sections of this report discuss The First Sixty Years (a Canadian prospective, development, problems); The Automotive Industry Under the Pact (provisions of the Pact; benefits, development of auto industry under Pact); Factors and Forces affecting the Canadian automotive industry (pattern of trade, Canadian market share and production, Canadian parts industry-position and structure, employment in Canadian industry, productivity, prices, profits and investment); The Global Outlook (safety; emission and fuel stds., growth in overseas operations); The Canadian Automotive Industry: Identification of the Issues (Auto Pact, Overseas Trade, aftermarket parts trade, R & D outflow); Outlook for Investment in the Canadian Automotive Assembly and In-House Parts Industry (record of investment, value of Canadian assets, investment sources, rate of return, barriers to investment); Outlook for Investment in the Canadian Automotive Parts Industry; Regional Aspects of the Automotive Industry (across Canada, Ontario 90% of Auto Industry); Research and Development (comparison of U.S. and Canadian, measures to increase investment in Canada); The "Canadian Car" (prospects, options, recommendations).

Romain, Ken (1981), " Auto Industry Cautiously Optimistic About Improvement," The Globe and Mail, March 30, B20

This article reports on the recent auto industry slump, its effect on Ontario, and speculates on the auto industry's future in Canada. Ontario accounts for approximately 90% of Canada's automotive production. The recent slump due to inflation, high interest rates, and sudden shift in consumer preference to small cars, declining birth rates, smaller families, fewer multi-car households and rising vehicle prices and maintenance costs, has cost more than 28,000 jobs in Ontario and numerous closings of plants dependent on the auto industry. Auto makers are changing plants for smaller cars production, for world cars and new technological improvements. Rate of growth of Canadian market is projected at 2% per year through the 1980's (vs. 4.5% in past 2 years). Both high interest rates and high inflation will continue to dampen recovery efforts. Japanese built cars now account for more than 20% of the Canadian market. Industry changes in the next few years are also mentioned. This article also has several references to employment figures, plant locations and production, and investment figures.

Romain, Ken (1981), "Ford to market propane cars," The Globe and Mail, May 21, B2

This article reports on an interview with Roy Bennett, chairman and chief executive officer of Ford Motor Co. of Canada Ltd. The 1982 Cougars and Granadas will come with an optional propane engine. Most likely users of Ford's propane cars are major fleet users, such as taxies or companies with fleet cars, that have a central refueling station. Bennett views propane as a short-term alternative fuel for Canada and methanol for the long term.

Romain, Ken (1981), "Japanese Push Pact on Auto Parts Firms," The Globe and Mail, (June 17), B1.

In an interview with Hayao Yazaura, director of the overseas department of the Japan Auto Parts Industry Association, said that Japanese auto parts manufacturers are looking to their counterparts in Canada for licencing arrangements between the two countries. These licencing arrangements could lead to joint venture operations and where companies in the two countries share technology.

Romain, Ken (1981), "Average '90 Car May Be Better, But Smaller and Cost $25,000.," The Globe and Mail, (June 18), B2.

In a study conducted by Arthur Anderson and Co., accountants, of Detroit, predicts that the average price of a new car will range between $25,000 and $30,000 by 1990 under current inflation rates. Based on interviews of 164 U.S. parts and automotive executives, government and finance officials, they state that: 15% of the market will be held by 2-3 cylinder cars by the 1990's; downsizing will continue with average car weight down to 2250 lbs. by 1990; 1% growth rate for auto industry through to 1990; there will be increasing substitution of light weight materials; U.S. cars will have a 35 mpg U.S. rating and foreign cars will be 40 mpg U.S.; foreign cars will still undersell N.A. built models by $1500 a vehicle, about the same as now; and full size cars will account for 10% of market, intermediates 15%, compacts 25%, subcompacts 35%, and mini commuter cars 15% by 1990.

Rowand, Roger (1981), "Improve It or Lose It, Industry Told," Automotive News, March 2, p. 2,46.

In a speech to the Society of Automotive Engineers, F. James McDonald, president of GM stated that the U.S. auto industry has to improve its quality and cost-competitiveness or go off-shore or go down the drain. "Comeback--that is customers taking their cars back to the dealer more than once for the same problem--is the highest single reason for customer dissatisfaction." GM is monitoring customer satisfaction performance of 2000 of their largest dealers through a survey sent to first year owners of GM cars.

Sedgwick, Michael (1979), "The Motor Car 1946-56",: London B.T. Batsford Ltd.

This text covers the decade from 1945-6 to the mid fifties dealing with almost all models offered to the general public for street use. It deals in turn with every country which had an active motor industry during the period 1945-56: Spain, Belgium, Holland, Austria, Switzerland, Czechoslovakia, Poland, Sweden, Denmark, Norway, Russia, Australia, Japan, and Argentina - with special stress laid on the major manufacturing nations of the time: the United States, Great Britain, Germany, France and Italy.

Sloan, Alfred P. Jr. (1965), My Years With General Motors, New York, New York; McFadden Books.

This book relates Sloan's experiences with General Motors and goes into depth regarding many facets of the automobile industry.

Sections of the book include; The Great Opportunity-I; The Great Opportunity-II; Concept of the Organization; Product Policy and Its Origins; The "Copper-Cooled" Engine; Stabilization: Co-ordination by Committee; The Development of Financial Controls; Transformation of the Automobile Market; Policy Creation; Financial Growth; Evolution of the Automobile; The Annual Model Change; The Technical Staff; Styling; Distribution and the Dealers; GMAC; The Corporation Overseas; Non-automotive: Diesel Electric Locomotives, Appliances, Aviation; Contributions to National Defense; Personnel and Labour Relations; Incentive Compensation; The Management: How It Works; and Change and Progress.

Stern, Marc (1980), "GM's Arbitration System Working," Automotive News, May 19, 18.

In 1978 GM set up a test 3rd party arbitration program in Minneapolis-St. Paul to handle unresolved customer warranty complaints. Now the program is in 3 other cities and being expanded. The program is run in conjunction with the B.B.B. 80% of the disputes are settled through simple mediation and the other 20% through arbitration. Program is GM's bid to increase customer satisfaction. Program brings the factory right into the problem and frees the dealership to concentrate on dealership matters.

Transport Canada (1979), "The Future of the Automobile in Canada: Growth, Usage, Energy, Technology, Safety, Environment, Other Modes, and Urban and Inter-City Aspects," Role of the Automobile Study, Strategic Planning Group, TP 1148, T46-12/1979, April.

This study appraises the role of the automobile in Canada until the end of the century. Sections of the report include: The Growth and Use of the Automobile and its Connection with Urbanization; The Automobile--Future Energy, Technology, Materials and Non-Transport Alternatives 1975-2000; The Future of the Automobile in terms of Scenarios; The Automobile and transit in an Urban Context; The Automobile, Its Current Role, Cost-Effectiveness and Energy Productivity for Inter-City traps as Compared with Other Modes; The Automobile, Safety and the Environment; and Conclusions and Measures for Consideration.

Trivoli, G. William (1971), "The Effects of Price Concessions on New Automobiles to Dealers During the Model Year 1969," Journal of Business, 44, 398-407.

Approximately half of the auto dealers in the greater Pittsburgh area were interviewed in order to assess the impact of manufacturer special sales incentive (primarily cash) programs upon new automobile dealers' pricing practices. Because manufacturers resist changing suggested price, they tend to use sales incentive programs that effectively lower the cost to the dealer. It is only if a dealer is certain to meet his quota that he passes on the maximum amount of cash discount to consumers. Hence, there is a tendency for cash sales incentive programs to lead to increased selling effort, rather than to the dealers simply passing on the full amount of the incentive payment. The study found, however, that dealers responded by convertin discounts into cash savings for their customers, even though they might not be certain of discount for which they would qualify.

U.S. Department of Commerce, Industry and Trade Administration (1980), "Motor Vehicles," in 1980 US Industrial Outlook for 200 Industries with Projections for 1984, January, 271-287

This extensive overview article discusses the U.S. motor vehicle industry for 1980-81 and gives projections till 1984. Topics discussed include: domestic vs. import sales trends, car size trends, distribution of inputs and outputs of industry, regulatory influences (exhaust emissions, safety, fuel conservation), R&D (engines, fuels, electronics) and industry outlook. Trend towards smaller cars with 55 - 57% of market in 1980. Import sales in U.S. increased to 21.7% in 1979, up 4% over 1978. Auto makers are working to adhere to fuel efficiency and emission regulations. Several new engine types under study by auto makers. Rapid expansion of electronic components in new cars.

U.S. Department of Commerce, (1981), "Motor Vehicles," in 1981 U.S. Industrial Outlook for 200 Industries with Projections for 1985, Bureau of Industrial Economics, (January), 316-327.

This extensive overview article discusses the U.S. motor vehicle industry for 1981-82 and gives projections until 1985. Topics discussed inculde: domestic vs. import sales trends, car size trends, distribution of imports and outputs of industry, regulatory influences (exhaust, emissions, safety, fuel conservation), R.&D. (engines, fuels, electronics) and industry outlook. Import sales in U.S. increased to 26.7% in 1980, up 3% over 1979. Auto makers are working to adhere to fuel efficiency and emission regulations and the challenge of the imports greatly. Several new types of engines are under study by the auto makers. Rapid expansion of electronic components in cars will continue.

Valéry, Nicholas (1979), "Motoring into the 1980's--A Survey," The Economist, March 10, 270, 4-32.

This comprehensive article surveys the world automotive industry and provides a prognosis for the 1980's. Changes and problems facing the North American, Japanese and European manufacturers are discussed in depth.

Westell, Dan (1981), "Product still held most important selling point," The Globe and Mail, May 13, B4

This article reports on an interview with Ronald Kovas, president of J. Walter Thompson Co. Ltd. of Toronto. J. Walter Thompson has been studying the components of brand loyalty. Kovas states that the M.A. auto market will bounce back when the North American manufacturers can produce a comparable car to the Japanese in terms of quality and mileage. The Japanese had a jump on the North American manufacturers in terms of the consumer's desire for fuel-efficient cars.

White, Lawrence J. (1971), "The Automobile Industry Since 1945," Harvard University Press, Cambridge, Massachusetts.

This book on the American automobile industry is a revised and edited version of Dr. White's Ph.D. dissertation submitted to Harvard University in March 1969.

Sections of the book include: A Brief Automotive History of the Postwar Period; Manufacturing Technology and the Planning Process; Estimated Economics of Scale and Minimum Efficient Size; Entry into the Automobile Industry; Integration and Diversification; The Structure of Demand; Prices and Pricing Policy; Dealers and Dealer Systems; Product Behaviour: A General Summary; The Small Car Story; Product Behaviour: Durability, Styling, Models, and Model Proliferation; Other Aspects of Behaviour; Air Pollution and Automobile Safety Issues; Performance: An Education; and Recommendations for Public Policy.

Wilton, David A. (1976), An Econometric Analysis of the Canada-United States Automotive Agreement: The First Seven Years, Economic Council of Canada, Ottawa: Ministry of Supply and Services Canada, EC22-40/1976.

This study provides an econometric assessment of the impact of the Automotive Agreement on the Canadian automotive sector and the Canadian economy in terms of: growth rates, employment generation, investment expenditures, productivity, factor shares, inflation and the balance of payments. The CANDIDE model of the Canadian economy was utilized to determine the impact of the Auto Pact on the Canadian economy. On the assumption of no specific alternative government policy, the Auto Pact had the following effects on the Canadian economy for 1971. GNE was 5% higher, total employment increased by almost 4%, retail prices of automobiles declined by 12%, while large increases in corporate profits (8.8%) and in total wages, salaries and supplement (6.5%) occured, real wages per employee only modestly increased (2.6%) real gross capital stock in the Canadian economy increased (1.3%), and there was a strong favourable effect on the current account of the balance of payments. Auto Pact had the greatest impact on strengthening the Ontario economic base. The Canadian economy is now even more dependent upon the economic activity in the U.S. The fact that the automotive trade surpluses of 1970-71 have dissipated into substantial deficits in 1974-75, may signal reversal of some of the positive effects of earlier years.

Wolpert, Henry W. (1979), "Why Conventional Automobile Styling Research May Become Obsolete," in Advances in Consumer Research, Volume VII, Jerry C. Olson, ed., Ann Arbor, Michigan, Association for Consumer Research, 22-24

The author, of Ford Motor Company, reviews the styling process and sets out the objectives (1. choose best style considering consumer tasks, 2. fit style to market place, 3. derive model offerings). The styling process may be affected by major changes including government regulation and fuel problems, e.g., while absolute importance of styling has remained same, the relative level has changed, now ranking below gas mileage. Styling segments are identified including: 1) conservative, functional styling with minimum of change 2) non-functional, "show" type styling, and 3) "follower"segment.

World Business Weekly (1981), "Why the Auto Pact may now work against Canada," March 30, 33

This article reports on the negative effects the Auto Pact may have on Canada in the years to come. Canada has suffered less from the recent sales slump than the U.S. American auto sales dropped 15.8% in 1980 whereas Canadian sales dropped 7.2%. Most R&D is U.S. based, and changes in manufacturing methods may enable companies to meet their Canadian value - added largely from assembly. Disappearance of engine production in Canada could occur by 1985. Fourteen percent penalty for failing to meet required ratios under the Auto Pact.

Wright, Patrick J. (1979), On A Clear Day You Can See General Motors, New York, New York; Avon Books.

This book is John Z. Delorean's story of his 17 years with GM and the insights he gained. The book goes into depth in regards to the many facets of the auto industry.

Sections of the book include: Why I Quit General Motors; The Fourteenth Floor; Loyalty-Team Play-The System; How Moral Men Make Immoral Decisions; My Life in Autos and Pontiac; The Pontiac Revival; Big Problems at Chevy; Turning Chevrolet Around; Getting The USA to See Chevrolet; The Vega; The 1970 UAW Strike; Pushing Small Cars In A Big Car Company; GM In Form and Substance; Work To Be Done on Fourteen; General Motors Decline; Epilogue; and Conclusion.